

# Determinants of the choice of private hospitals by patients

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## Abstract

**Objective and Background:** Today, patients show more sensitivity in selecting healthcare services compared to the past. Different factors, such as quality of service, costs, economic conditions, and social and cultural status, contribute to selecting hospitals. The present study attempts to examine reasons why patients prefer private hospitals for treatment.

**Methodology:** This cross-sectional descriptive study was conducted in 2009 on patients in Private Hospital of Tehran University of Medical Science. Random sampling was used (n=120). Data were collected using researcher-made questionnaire whose validity and reliability was then confirmed. Collected data were analyzed through t-test and ANOVA.

**Findings:** In selecting hospitals, patients gave the highest score to experienced and skilful doctors (mean = 3.55) and the lowest score to relatives working at the hospital (mean = 1.16). Mixture of quality factor (mean = 56.07) was the most important and mixture of economic factor (mean=32.59) was the least important factor.

**Conclusion:** Given the interaction between society and hospitals as well as constant need for healthcare services, for a proper objective management in hospitals and attracting customers (patients) consumers' opinions, needs, and expectations must be taken into account while improving quality and quantity of services and improving processes.

**Key words:** Patient, Private Hospital, Selection.

## Introduction

Hospitals are integral parts of medical and social systems that provide the public with healthcare services. Variety of services is offered by hospi-

tals. To maintain quality of service, hospitals should observe medical ethics and rights of patients [1]. Like everyone else, a patient has vital needs. Illness may prevent him from meeting his needs completely. Therefore, increased knowledge over patient's needs is helpful in identifying those needs and assisting patients in meeting them. Such needs provide a useful framework for delivery of healthcare services. Thus, treatment and healthcare staffs should possess required knowledge on needs, how to meet them, and situations where these needs can be satisfied [2].

Patients usually expect easily accessible nursing services and proper treatment in all stages. They prefer to deal with knowledgeable, reliable, and polite staff and have information on how and where these services are provided [3]. In the recent years, and due to competition over customers, reduced costs of healthcare services and increased income for hospitals, attentions have been drawn to evaluation of patients' opinions [4]. Therefore, hospitals cannot ignore patients' needs and offer services only based on their own interests. In today's competitive worlds, customers are of great importance for providers of healthcare services. In such conditions, of course, customer needs, behaviors, interests, and sensitivities become extremely important in designing and directing services [5].

Citing Okorafor, Yaghubi points out that today patients play more prominent roles in making decisions and selecting hospitals than they did in the past [6]. In his study, Sanayei notes that study of consumer's behavior is an important part of marketing since for proper marketing we need to properly understand consumer's needs and demands [7].

Taylor *et al.* showed that variables such as easy access, quality of care, hospital reputation, and waiting time are among the determinant factors

in selecting a hospital. They found that providing patients with proper information may help them make an informed decision [8].

Geber Michael *et al.* (2007) conducted a study on 1,657 patients in Eritrea. They found that important factors such as education, quality of healthcare services, wages, severity of disease, social status, and patient's place of residence statistically contribute to selecting healthcare providers [9].

Coulter *et al.* reported factors such as chances of successful surgery, waiting time, hospital reputation, follow-up capacities, doctors' reputation, doctors-hospital relationships, hygiene standards, and quality of service are likely to affect patient's decision in selecting hospitals [10].

Boshoff showed that quality of service, empathy from nursing staff, and insurance coverage from private section affect loyalty and satisfaction of customers as marketing targets [11]. In Iran, both private and public sectors offer healthcare services and given the fact that private sector covers 18.8 percent of healthcare organizations [12], a fundamental question to ask is that for what major reasons patients select private organizations. The present study attempts to address this question through examining determinant factors in selecting private healthcare providers by patients in private hospitals administered by Tehran University of Medical Science.

## Methodology

This descriptive cross-sectional study was conducted in 2009 on patients in four private hospitals supervised by Tehran University of Medical Science (Madayen, Eyvaz Zadeh, Shahryar, and Alvand). In different wards of these hospitals, 120 patients were selected by random sampling. In cases where, due to poor health conditions or small age, patients were not able to answer the questions, attendants were asked to answer the questions.

A researcher-made questionnaire was used for data collection. The first part of the questionnaire contained 9 questions on demographic profiles of patients. The second part (23 questions) was designed on Likert scale (1: a little to 5: very much) for four categories: external factors (6 questions: recommendation by doctor, access to doctor after surgery or treatment, skilful and experienced doctors, long waiting time and delay in other hospitals,

hospital reputation and background, short home-hospital distance), quality factors (9 questions: doctor-patient relations and continuous presence of doctor at patient's bed, doctors' reputation, presence of patient's doctor in hospital, skilful and experienced nursing staff, good conduct of nursing staff and providing information, good conduct of hospital staff, orderly conditions in hospital, hygiene and cleanliness, advanced diagnosis and treatment equipment), personal factors (6 questions: presence of medicine and paramedic students in public hospitals, personal preferences, recommendations by relatives, previous experiences with the same hospital, Employment of relatives in the hospital, belief in cost-effectiveness of private hospitals), and economic factors (2 questions: personal income and treatment costs). In addition, two yes/no questions were designed to examine the effects of these factors on selecting a particular hospital.

We used previous studies and interviews with scholars to design questionnaires. We also gathered opinions of university professors to evaluate validity of questionnaires and remove potential problems. We used Cronbach's alpha for reliability evaluation and found  $r=0.78$ . Data obtained through questionnaires were analyzed using t-test and ANOVA.

## Findings

The respondents were composed of 55% women and 45% men. Thirty percent of patients were above 60. Eighty percent were married and 37.5% were housewives. Among these patients, 41.7% had an income between IRR 300,000 and 600,000 and 34.2% did not have high school diploma. Thirty five percent were covered by social security insurance and 60% were referred by their personal doctor to hospitals. In addition, 76.7% had been previously hospitalized. Table I shows the distribution of demographic variables for patients.

The highest score was that of quality factors (mean = 56.07) while the lowest score belonged to economic factors (mean = 32.59) (Table II).

Among the personal factors, personal preference (2.86) had the highest mean and relatives working at the hospital (1.16) had the lowest mean value.

In the group of external factors, skilful and experienced doctors (3.55), access to doctors after treatment (3.22), recommendation by doctor

(3.06), and short home-hospital distance (1.71) had the highest and lowest scores, respectively.

*Table 1. Demographic variables distribution of patients in selected hospitals*

Demographic variables		Percent
Sex	man	55
	women	45
Age	Less than 15	1/7
	Between 16 to 30	15/8
	Between 31 to 45	25
	Between 46 to 60	27/5
	More than 60	30
Marital statues	single	20
	married	80
Education	illiterate	8/3
	below high school	34/2
	High school	30
	association	12/5
	Undergraduate and higher	15
Job	officer	10/8
	Self-employed	10/8
	student	5/8
	unemployed	2/5
	retired	26/7
	Housekeeper	37/5
	labor	3/3
	others	2/5
Monthly income	Less than 300 \$	39/2
	Between 300 to 600 \$	41/7
	Between 600 to 900 \$	8/3
	More than 900 \$	10/8
Type of Insurance	Health services	35
	Social security	29/2
	Armed forces	2/5
	Other Insurance	20/8
	Without Insurance	12/5
Referral way	Privet clinics	60
	Hospital clinics	5/8
	health system Referral	5/8
	Personal regard	16/7
	Friends and acquaintances	8/3
	others	3/3
History of hospitalization	Yes	76/7
	No	23/3

In the category quality of service, patient-doctor relationships, presence of the doctor in hospital, doctors' reputation, skillful and experienced nursing staff, hygiene and cleanliness with mean scores above 3 were among the determinant factors. The lowest score was that of orderly conditions (mean = 2.40).

In economic factors, personal income and treatment costs with the respective mean values 1.66 and 1.60 had the highest and the lowest scores, respectively.

In response to the question "If you became sick again, would you come to this hospital?", majority of respondents (88.3%) said yes. In addition, 78.3% of respondents confirmed that they would recommend the hospital to their friends and relatives after being discharged.

*Table 2. Factors Mean and SD in the choice of selected hospitals*

Reasons for preferring treatments from private hospitals	(Mean $\pm$ SD)
Economic factors	32/59 $\pm$ 22/69
External factors	50/16 $\pm$ 10/95
Personal factors	37/58 $\pm$ 15/17
Service quality factors	56/07 $\pm$ 17/58

T-test revealed significant relation between gender and quality of service; that is, women are more sensitive to quality of service compared to men.

ANOVA analysis suggested significant relationship between age groups, external factors, and quality of service (quality and external factors had more effects on older patients).

T-test also confirmed significant relationship between marital status and external factor (single patients cared more about external factors).

ANOVA indicated significant relation between education and external factors and between education, quality of service, and selecting a hospital. Individuals with higher levels of education paid more attention to external factors and quality.

ANOVA also showed that there is a significant relationship between quality of service and how a person is referred to hospital. Quality of service was more important to those referred from a doctor's office or those who came to hospital for personal preference.

T-test suggested significant relation between previous hospitalization and quality of service. For



Table 3. The relationship between demographic variables and factors in selected hospitals

Factors Demographic variables	p-value			
	Economic factors	Personal factors	External factors	Service quality factors
Sex	0/09	0/61	0/241	0/013
Age	0/72	0/506	0/001	0/002
Marital statuses	0/56	0/89	0/002	0/17
education	0/24	0/73	0/023	0/011
Job	0/384	0/123	0/238	0/295
Monthly income	0/274	0/443	0/451	0/538
Type of Insurance	0/91	0/43	0/82	0/72
Referral way	0/226	0/176	0/659	0/003
History of hospitalization	0/264	0/701	0/519	0/032

those who had been previously hospitalized, conduct of nursing staff and provision of information was the most important factor in selecting hospitals.

No relation was found between occupation, insurance, income, and these factors.

## Discussion

Designing and planning services for attracting the public and customers should be based on the opinions of potential targets of those services [13].

In this study we examined four mixtures of determinant factors in selecting private hospitals. As our findings indicate, patients regard quality of service as the most important factor in selecting hospitals while economic factors do not play a significant role. This is in line with Taylor *et al.* [8] who found that easy access, quality of service, and hospital reputation were more important in patients' view compared to factors such as waiting time. The results also held for patients with higher levels of education.

Jackson argues that another determinant factor in selecting hospitals is satisfying experience of previous hospitalization [14]. In our study, majority of respondents (67.50%) had experienced previous hospitalization. This may show their satisfaction with previous hospitalization.

In "Determinant Factors in Selecting Healthcare Providers in Nigeria", Lloyd *et al.* (2007) found that two factors, namely distance and monetary value, encouraged people to seek healthcare services. However, money is of less importance in selecting healthcare service providers. Thorough more qualitative analyses, they found that monetary value of services is an important factor since many people

with low income choose self-care. Moreover, their study revealed that older people are more likely to go to private hospitals [15]. Our findings are in line with the results obtained by Lloyd *et al.*

Coulter *et al.* [10] studied determinant factors in selecting hospitals in London. Quality of healthcare services and hygiene standards were of the highest priorities in their study. They found that for older individuals, factors such as hygiene and cleanliness and access to doctors are more important. We found similar results in our study. Furthermore, Coulter *et al.* found that the shorter the waiting time, the more important would become other factors, including facilities for parking, additional services offered by hospitals, reputation, and being a hospital of choice for celebrities. Although these factors were more or less present in our study, patients did not stress them.

Varmaghani [16] studied determinant factors in selecting private and public hospitals in Tehran. He pointed out that both private and public hospital patients based their choices on presence of experienced doctors in hospitals. Patients in our study stressed the importance of this factor.

"Reasons Why Patients Chose Treatment from Private Hospitals" [17], a study conducted in Amin Isfahan Institute, indicated that recommendation by doctors was the leading factor (70%). Fifty two percent of patients said that if their doctors worked at a public hospital, they would be prepared for hospitalization in those hospitals and 28% found no difference between public and private hospitals. Doctors' recommendation (mean = 3.06) in our study was a determinant factor in selecting hospital.

## Limitations

Due to limited time, authors did not include other public hospitals as well as hospitals run by SSO, Armed Forces, NIOC, Relief Foundation, etc.

## Conclusion

Unlike the past times, patients are not indifferent to services they receive while in hospitals. They acknowledge the value of money they pay and expect services of higher quality. Patients seek best available healthcare services. Given patients' increased awareness and sensitivity to their conditions and treatment processes, each hospital needs to make required changes in its service framework based on proper models.

Hospital managers must be aware of criteria for a good hospital and what patients expect from a hospital. They should identify what aspects are considered more important to patients and what issues results in their complaints. To win in the competitive environment, managers should take into account all these factors and make optimum use of available resources.

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